

TYPE-DESIGNATIONS AND OTHER NOTES CONCERNING
VELIIDAE (INSECTA: HEMIPTERA)¹

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Abstract.—Lectotypes are designated for *Microvelia americana* Uhler 1895, *M. circumcincta* Champion, *M. paludicola* Champion, *M. panamensis* Champion, *M. torquata* Champion, *M. signata* Uhler, *Rhagovelia distincta* Champion, and *Hebrus americanus* Uhler. As *Hebrus americanus* Uhler 1884 was transferred to *Microvelia*, *Microvelia americana* Uhler 1895 is a homonym; the next available name for the latter is *Microvelia gerhardi* Hussey. *Microvelia guatamalensis* McKinstry 1937 is synonymized with *M. circumcincta* Champion 1898. *Rhagovelia atrispina* is described as a new species and is compared with *R. distincta*. *Microvelia lacunana* Drake and Plaumann is transferred to the genus *Xiphovelia* (new combination) and is compared to the type of *Xiphovelia ensis* Lundblad. Emendations are given for previously published species names in the *Microvelia austrina* Group.

In connection with various projects involving American veliids, it has become evident that even the status of some of our commoner species is in doubt. In this work I have designated eight lectotypes, described a new species of *Rhagovelia*, and discussed the synonymy of several species. Additionally the genus *Xiphovelia* is noted for the first time in the New World.

I am indebted to the following people for their assistance in various ways during the preparation of this paper; the abbreviations for the various institutions are used to indicate the disposition of specimens examined: R. K. Benjamin, Rancho Santa Ana Botanical Gardens, Claremont; A. S. Menke and J. L. Herring, Systematic Entomology Laboratory, Agric. Res. Serv., USDA (USNM); H. E. Evans and D. Fronk, Colorado State University, Fort Collins; C. H. C. Lyal, British Museum (Natural History), London (BMNH); P. D. Ashlock, University of Kansas, Lawrence (KU); P. Robinson, University of Colorado Museum (CU); H. C. Chapman, Lake Charles, Louisiana (HCC); P. H. Arnaud, California Academy of Sciences, San Francisco (CAS); M. S. Polhemus, Spokane, Washington; B. Gustafsson, Riksmuseum, Stockholm; S. Miyamoto, Fukuoka. Types held in the Polhemus Collection (JTP) are irrevocably committed to later placement in a designated type repository.

Microvelia americana (Uhler)

Hebrus americanus Uhler, 1884. Standard Natural History. 2:274.

This species was described by Uhler (1884) in a large work on natural history that did not lend itself to the designation of a type. He took pains to point out that the species was not a *Microvelia*, a genus described by early authors as having six-segmented antenna and the tarsal formula 2-3-3. He did not designate a type, and did not give a type-locality with any exactness, stating only its occurrence in "the Middle States," Maine, and lower Canada. While there are several species that would fit his description, only one commonly occurs in the region given.

McKinstry (1933) attempted without success to locate the type in the U.S. National Museum and British Museum, however Dr. Herring has located the syntype series in the U.S. National Museum.

Uhler's original description seems sufficient to differentiate this species from other *Microvelia* commonly found in the region he described. Further, in 1910 Torre-Bueno described the life history of specimens from New York and New Jersey which he designated as *M. americana*, this apparently being the first official transfer of *Hebrus americanus* to *Microvelia*. In 1916 he described the legs and antennae in a way matching Uhler's description.

The primary differentiating characteristics of *Microvelia americana* (Uhler) are: Pronotum not produced caudad of suture separating pro- and mesotergum; hind tibia straight; ventral surface of 1st genital segment with bristly hairs; front femur not black or flattened; last abdominal tergum wider than long; 3rd antennal segment shorter than 4th.

Uhler did not designate syntypes, and while the series from his collection that is now before me unquestionably contains some or all of the specimens that he used to describe the species, the only one bearing a date has been chosen as lectotype. It is a male in a good state of preservation, on a point, with two labels: "N.H. 1881" in script, and a printed label "PR Uhler Collection." I have added a label: "Lectotype, *Hebrus americanus* Uhler 1884, J. T. Polhemus" (USNM).

Because of the lack of date labels, and different collection localities, I have not designated the remaining specimens as paralectotypes.

Microvelia gerhardi Hussey

Microvelia gerhardi Hussey, 1924. Bull. Brooklyn Entomol. Soc. 19:164
(type in Univ. Michigan Mus. Zool.).

Microvelia americana Uhler, 1895 (nec. Uhler, 1884). In Gillette and Baker, Hemiptera of Colorado, Agr. Exp. Sta. Bull. 31, Tech. Ser. 1, pp. 61-62.
(Homonym of *Microvelia americana* (Uhler, 1884)).

Uhler, ignoring his previous description of *americana* under *Hebrus* in 1884, redescribed what he thought was this species in 1895 in a work on Colorado Hemiptera. A search has been made for the type-material in the Colorado State University Collections, the Baker collection at Pomona College, and the U.S. National Museum; fortunately, at the latter, Dr.

Herring located two male syntypes in the USNM portion of the Baker material. These bear only "Colo" and numbers on the labels, plus the Baker collection printed labels. Dr. H. E. Evans kindly located the original collection journals of both Gillette and Baker at Colorado State University and verified the collection data as that given by Uhler (1895). There are copies of the Gillette and Baker journals in the USNM which had previously allowed Dr. Herring to furnish collection data and verify that these specimens were indeed syntypes.

The specimen chosen as lectotype has two labels: "Colo 1406" and a printed "Collection C. F. Baker" label. To these will be added a label: "Lectotype, *Microvelia americana* Uhler 1895, J. T. Polhemus." For this specimen the Baker journal gives the following data: "1406. April Footh. W. Ft. Collins, Colo., CFB."

The other syntype has similar labels, except the number is 1407, which has a Baker journal entry: "March Footh. W. Ft. Collins, Colo., CFB." This specimen will be labeled as a paralectotype. Both are in the USNM.

Both males are in good condition, with all appendages intact. The numbered entries in Baker's journal before and after the 1406 and 1407 entries are given as 1894, so the date of collection seems firmly established as 1894. The entries in Gillette's journal for 1406 and 1407 refer to membracids, so although Uhler (1895) listed "(Gillette)" after the collection data, the data itself is recorded in Baker's journal.

When Torre-Bueno (1910) transferred *Hebrus americanus* Uhler 1884 to *Microvelia*, *M. americana* Uhler became a homonym, and as the two are not conspecific, the next available name for the latter is *Microvelia gerhardi* Hussey. Uhler's 1885 description noted that the legs are "yellowish-testaceous, with the femora, tibiae and tarsi dusky or piceous above," which fits *gerhardi* and the type-specimens very well.

Three species of the subgenus *Kirkaldya* inhabit Colorado (*beameri*, *gerhardi*, *torquata*) with perhaps *americana* also reaching the eastern border, but only *gerhardi* and *torquata* Champion have been found along the front range in the vicinity of Fort Collins. Of these *gerhardi* is by far the commonest, and *torquata* also lacks piceous leg markings. *Microvelia beameri* is found in the southwestern part of Colorado.

Microvelia circumcincta Champion

Microvelia circumcincta Champion, 1898. *Biologia Centrali Americana, Rhynchota.* 2:129.

Microvelia guatamaleensis McKinstry, 1937. *J. Kan. Entomol. Soc.* 10:38.
New synonymy.

Microvelia circumcincta has remained virtually unknown to recent American workers. McKinstry took no note of it when describing *M. guatamaleensis*, which is a synonym. This species has the vertex barely raised above

the top margins of the eyes, lacks spines on both anterior and posterior femora, has slender legs, and is ordinarily dark dorsally with a transverse ferruginous band on the pronotum and a ferruginous line down the middle of the abdominal segments. The hairs bordering the ventral depression of the male 1st genital segment are of 2 lengths; those at the sides are much longer than those caudad.

I have studied the type-series of *circumcincta* and have selected a lectotype with the data given below. It is a female on the left side of a card bearing two females; I have placed an arrow and "type" below the lectotype. This is the lighter colored of the two females on this card and is the specimen figured by Champion. I have added my labels to the lectotype and two paralectotypes.

Material examined.—GUATEMALA: Lectotype (apterous ♀) and paralectotypes, 1♀ apterous, 1♀ alate, San Gerónimo, Champion (BMNH); 1♂ apterous, El Salto Escuintla, 1934, F. X. Williams (paratype, *M. guatamalensis*) (KU). BELIZE: 4♂♂, 4♀♀ apterous, Mountain Pine Ridge, CL 641, xii-30-1973, J. T. Polhemus (JTP). MEXICO: Guerrero: 1♂ apterous, 40 mi N Acapulco, CL 1045, iv-26-1964, J. T. & M. S. Polhemus (CU). 1♂, 1♀ alate, Real de Arriba, Temascaltepec, H. E. Hinton & R. L. Usinger (HCC). Morelos: 1♂ apterous, 20 mi S Cuernavaca, CL 1047, iv-24-1964, J. T. & M. S. Polhemus (CU). Oaxaca: 1♂, 1♀ apterous, Tequisistlan, CL 1066, iv-30-1964, J. T. & M. S. Polhemus (CU). Puebla: 1♂ apterous, 7 mi W Izucar de Matamoros, CL 1050, iv-27-1964, J. T. & M. S. Polhemus (CU). Sinaloa: 2♂♂, 1♀ apterous, 1♂, 1♀ alate, Santa Lucia, iv-26-1974, M. S. Polhemus (JTP).

Microvelia paludicola Champion

Microvelia paludicola Champion, 1898. Biologia Centrali Americana, Rhynchota. 2:127.

Microvelia alachuana Hussey and Herring, 1950. Fla. Entomol. 33:117.

Microvelia paludicola Champion is a larger species than *M. torquata* Champion, with which it has been much confused, being more elongate and usually having a darker venter than the latter. The male first genital segment is also more elongate and has a ventral, proximal, longitudinal sulcus; both species lack hair tufts on this structure.

In southern populations (Mexico, Guatemala and for *paludicola*, Texas) of these two species, they can be readily separated by the light abdominal venter in *torquata* and the plumbous venter in *paludicola*. Also *torquata* has the vertex of the head very convex, while it is much less so in *paludicola*.

I have studied the type-series of *paludicola* and selected a lectotype, the male of a male-female pair on a card with the data given below. I have added my lectotype label, in addition to the circular "type" label and

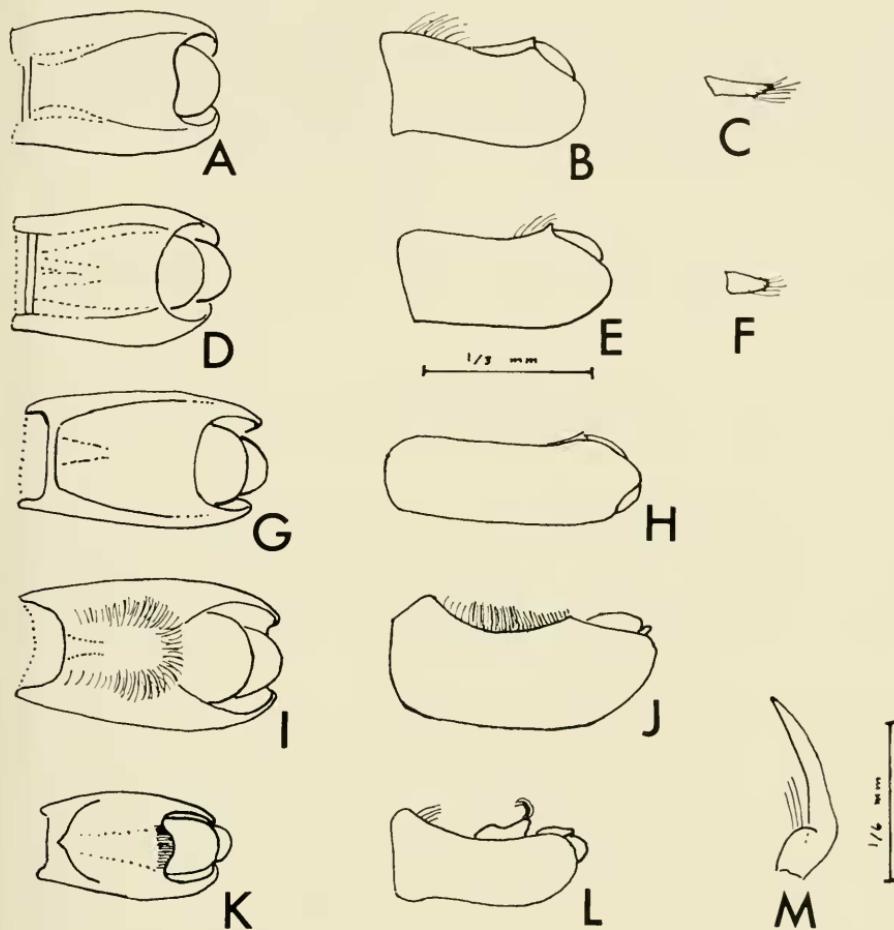


Fig. 1. A-L. *Microvelia*, male genitalia; A, D, G, I, K, genital capsules, ventral views; B, E, H, J, L, same, lateral views; C, F, right male parameres. A-C, *americana* Uhler. D-F, *torquata* Champion. G-H, *paludicola* Champion. I-J, *circumcincta* Champion. K-L, *panamensis* Champion. M, *Xiphovelia lacunana* (Drake and Plaumann), right male paramere.

another with "B.C.A. Rhyn. II., *Microvelia paludicola* Ch." The three paratypes were also labeled.

Material examined.—GUATEMALA: Lectotype (alate ♂) and paratypes, 1♂, 2♀ alate, Duenas, G. C. Champion (BMNH); 4♂ alate, N of Patzicia, CL 1322, I-12-1970, J. T. Polhemus (JTP); 1♂, 1♀ apterous, 1♂, 4♀ alate, El Tapon area, CL 666, I-5-1974, J. T. Polhemus (JTP). MEXICO: Chihuahua: 1♂, 10♀ apterous, Camargo, CL 1005, iv-9-1964, J. T. & M. S. Polhemus (CU); 1♂, 1♀ alate, Camargo, vii-21-1951 Drake &

Hottes (JTP). UNITED STATES: Mississippi: 1♂, 1♂ apterous, Ocean Springs, v-25-1950, J. T. Polhemus (JTP). Texas: 1♂ apterous, El Paso, viii-27-1934, C. J. Drake (JTP); 1♂, 2♀♀ apterous, College Station, vi-26-1928, H. G. Johnston (JTP); 2♂♂, 3♀♀ apterous, Garner State Park, Nr. Uvalde, CL 600, xiii-8-1973, J. T. Polhemus (JTP). CUBA: 1♂, 1♀ apterous, R. Llojote, iii-21-1973, Decu & Hagen (JTP).

Microvelia panamensis Champion

Microvelia panamensis Champion, 1898. Biologia Centrali Americana, Rhynchota. 2:128.

This little species is very similar to *M. torquata*, differing primarily in the less strongly arched vertex of the head and the greatly different male genitalia (see Fig. 1). I have studied the type-series and selected a lectotype, with the locality data given below. The lectotype, which is the male figured in the Biologia, was removed from the card and placed on a point so I could study the ventral features. A female still resides on the original card, along with the original labels, so I copied the data and new labels as follows will be found with the lectotype: 1) David, Panama, Champion, 2) B.C.A. Rhyn. II. *Microvelia panamensis* Ch., 3) Sp. figured (this label is original). I have added my lectotype label, and also labeled the paralectotypes.

Material examined.—PANAMA: Lectotype (alate ♂) and paralectotype, 1♀ alate, David, Champion (BMNH); paralectotype, 1♀ apterous, V. de Chiriqui, 25–4,000 ft, Champion (BMNH); 1♂ apterous, Barro Colorado, C. Z., II-6-1939, C. J. Drake (JTP); 1♂, 1♀ apterous, Cerro Campana, v-7-1973, P. D. Ashlock (JTP); 1♂, 1♀ apterous, 3♂♂, 1♀ alate, El Valle, CL 1299, I-3-1969, J. T. Polhemus (JTP). COLOMBIA: 1♂, 1♀ apterous, 1♂ alate, Sierra Nevada de Santa Marta, Puebla Bello, 1,200 m, iv-14-1968, B. Malkin (JTP).

Microvelia signata Uhler

Microvelia signata Uhler, 1894. Proc. Calif. Acad. Sci. (2)4:288.

Microvelia setipes Champion, 1898. Biologia Centrali Americana, Rhynchota. 2:130.

Microvelia oreades Drake and Harris, 1928. Ohio J. Sci. 28:274.

Two specimens of this species bearing labels "San Esteban" and "Uhler type" are in the California Academy of Sciences. One of these bears a red label with "LECTOTYPE *signata*" and a label with "*Microvelia signata* Uhler" in script. The other has a yellow label with "PARATYPE *signata*." This lectotype was apparently designated by Van Duzee (communication from Dr. Paul Arnaud) but is invalid because it was never published.

I have added my own lectotype and paralectotype labels to these specimens and here validate the designation.

Specimens from *signata* bearing a printed label "San Esteban, Lower Cal. Mex., Chas. D. Haines, April 1889" and "*Microvelia signata* Uhler" in Uhler's handwriting have been found in the collections of the USNM and are also considered paralectotypes. These two specimens, on one long card on a single pin, are so labeled.

Lectotype material.—MEXICO: Baja California: Lectotype, ♂, macrop terous, San Esteban; Paralectotype, ♂, macropterous, San Esteban (both in CAS). Paralectotypes, 2♀♀, San Esteban, April 1889, C. D. Haines (USNM).

Microvelia torquata Champion

Microvelia torquata Champion, 1898. *Biologia Centrali Americana, Rhyn chota.* 2:128.

North American workers have confused this species with *M. paludicola* Champion, with the exception of McKinstry (1933) who diagnosed it correctly in his unpublished thesis. *Microvelia torquata* is a variable species for which I have established a series from Guatemala to Arizona, Utah and Colorado. The venter of the first male genital segment is without hair tufts, is slightly depressed medially, has a proximal longitudinal median carina flanked by depressions extending one third the length distally, and often has a glabrous spot distally. The vertex of the head is quite convex and elevated above eye level.

A clinal variation exists from the deserts to the mountains in the southwest U.S., with the mountain forms tending toward shorter antennae, dark abdominal venter and slightly more robust body shape. The mountain populations were first considered to be a separate species, but the examination of a number of series shows a gradual shift of character states from the desert to the mountains; the variation within some series is also pronounced. The male genitalia are not different in the mountain populations. The silvery patches of hair, often helpful in diagnosis of water striders, are quite variable in this species, even within a given series, so are not reliable for the separation of *torquata*. The antennal ratio also varies considerably, even within a series.

I have examined the type-series from the British Museum and have selected the male figured by Champion as the lectotype, with the data given below. I have added labels to the lectotype and single paralectotype. This specimen was glued on a card, with the distal two segments of each antenna detached but also glued to the card; the specimen was removed and placed on a point, but the distal antennal segments remain on the

card. In addition to the locality label, the type bears a round "type" label and one with "B.C.A. Rhyn. II. *Microvelia torquata* Ch."

Material examined.—GUATEMALA: *Lectotype* (δ , alate) and paralectotype, 1 φ alate, Geronimo, Champion (BMNH); 1 δ , 1 φ apterous, 38 mi S Huehuetenango, CL 1325, I-13-1970, J. T. Polhemus (JTP). MEXICO: Chiapas: 1 δ , 2 φ apterous, 16 mi S San Cristobal, CL 1079, 2 May 1964, J. T. & M. S. Polhemus (CU); 1 δ , 1 φ alate, 3 δ δ , 2 φ apterous, same place, CL 1330, I-14-1970, J. T. Polhemus (JTP); 1 δ , 2 φ apterous, 2 mi W Montebello Lakes, CL 1081, 2 May 1964, J. T. & M. S. Polhemus (CU). Jalisco: 1 δ apterous, 15 mi S Ixtlan del Rio, CL 1029, 22 April 1964, J. T. & M. S. Polhemus (CU). Michoacan: 1 δ , 3 φ apterous, Jacona, CL 1032, 23 April 1964, J. T. & M. S. Polhemus (CU). San Luis Potosí: 1 δ apterous, Ciudad del Maiz, CL 528, I-4-1971, J. T. & M. S. Polhemus (JTP). Sinaloa: 2 δ δ alate, 2 δ δ , 1 φ apterous, Santa Lucia, iv-26-1974, M. S. Polhemus (JTP). Sonora: 1 δ , 2 φ apterous, Guaymas, CL 1207, V-28-1966, J. T. Polhemus (JTP). Veracruz: 1 δ apterous, Alvarado, vii-28-1951, Drake & Hottes (JTP). UNITED STATES: Arizona: 2 δ δ , 2 φ apterous, 1 δ , 1 φ alate, Grand Canyon, Havasu Creek, CL 555, vi-2-1972, J. T. & M. S. Polhemus (JTP); 2 δ δ , 1 φ apterous, 1 δ alate, Sabino Canyon, CL 497, xi-27-1970, J. T. Polhemus (JTP). Colorado: 3 δ δ apterous, Denver, CL 26, iv-17-1961, J. T. Polhemus (JTP); 2 δ δ , 4 φ apterous, Hygeine, CL 171, iv-7-1963, J. T. Polhemus (JTP). New Mexico: 3 δ δ , 7 φ apterous, Glenwood, CL 319, iv-16-1965, J. T. Polhemus (JTP); 4 δ δ , 5 φ apterous, Mountain Park, CL 90, iv-14-1962, J. T. Polhemus (JTP). Utah: 2 δ δ , 3 φ apterous, Zion Nat. Pk., CL 282, II-22-1964, J. T. Polhemus (JTP). (Some of these series contained many more specimens; those listed here were examined closely and/or measured.)

Rhagovelia distincta Champion

Rhagovelia distincta Champion, 1898. Biologia Centrali Americana, Rhynchota. 2:135.

Rhagovelia mexicana Signoret, 1877. Bull. Soc. Entomol. Fr. 7(5):53.

Rhagovelia excellentis Drake and Harris, 1927. Proc. Biol. Soc. Wash. 40:134.

I have studied the syntypes of this species belonging to the British Museum. Other syntypes are listed as belonging to the Vienna Museum, but I have not seen them. From the series in hand I have chosen a lectotype, being the left male of a carded pair of males, marked it with an arrow and "Lect." on the card, and added my lectotype label below. In addition, there is a round "type" label, one with "H.H.S., Orizaba, Mexico," and another with "B.C.A. Rhyn. II., *Rhagovelia distincta* Ch. δ ."

There are 10 paralectotypes before me, that I have so labeled, plus 2 nymphs on one card.

Material examined.—MEXICO: Lectotype (apterous ♂) and paralectotypes 4♂♂, 2♀♀ apterous, Orizaba, H. H. S.; paralectotype, 1♀ alate, Orizaba, Dec. 1877, H. S. & F.; paralectotypes, 1♂, 2♀♀ apterous, Ciudad Mex., 8,100 ft, Forrer. (All in BMNH.)

(Many hundreds of specimens from numerous localities have been studied, but the species is adequately treated by Bacon (1956), so my voluminous records are here omitted for the sake of brevity.)

Rhagovelia atrispina Polhemus, new species

Male.—Robust, black, wedge-shaped brownish to grey spot on each side of pronotum, reaching laterally just past inner margin of eye; connexival margins, base of 1st antennal segment, proepisternum, acetabulae, trochanters, bases of fore and posterior femora yellow brown; medial portion of 7th tergum, 1st genital segment ventrally, testaceous. Dorsum covered with sparse silvery pubescence and scattered silvery setae laterally on abdomen; pleura set with semilong dark setae laterally. Venter plumbeus with fine golden pubescence.

Head with glabrous median furrow meeting a wedge-shaped glabrous spot posteriorly. Width of eye/interocular space, 22/15. Rostrum reaching almost to middle coxae.

Pronotum long, coarsely pitted, covering mesonotum; lateral margins almost straight, converging anteriorly, posterolateral angles broadly rounded; length/width, 68/87. Abdominal terga all broadly shining, first 6 subequal in length, 7 about 2.5× the length of 6 and subequal to length of 1st genital segment. Connexiva obliquely raised, narrowing caudad, without spines or processes.

Abdominal tergum 7 depressed on posterior ⅓, the depression bordered laterally by stiff setae as in *Rhagovelia distincta*.

Antennae moderately long, stout, clothed with short setae and scattered long black setae, proportions I-IV, 60:35:40:35. Fore tibia flattened and weakly dilated distally, with short tibial comb. Fore trochanter with an anteriorly directed stout black spine. Posterior trochanter with 6-8 small black spines. Posterior femur with 12-18 small teeth basally, followed just past basal ⅓ by a large spine and 10 moderate spines of decreasing length distally. Posterior tibia armed with short subequal teeth and apical spur. Measurements of legs:

	Femur	Tibia	Tarsal 2	Tarsal 3
Anterior	85	85	—	21
Middle	146	105	57	59
Posterior	120	118	17	26

Male paramere very similar to *R. distincta* as figured by Bacon (1956) but with thicker, longer setae.

Length 4.25 mm, width (across metanotum) 1.65 mm.

Female.—Similar in coloration to male. Abdomen strongly narrowed after first 3 segments, connexivum reflexed and almost meeting over tergum 5, diverging weakly caudad. Abdominal terga 6 and 7 weakly carinate longitudinally, 7 with a tuft of stiff posteriorly directed setae caudad. Abdomen curving upward posteriorly to a 45° angle from the longitudinal body axis. Middle femora flattened over basal $\frac{1}{3}$. Posterior femur armed at apical $\frac{1}{3}$ with a stout spine followed by 4 or 5 short spines; posterior tibia unarmed. Length, 4.6 mm; width (across metanotum), 1.9 mm.

Material examined.—MEXICO: Holotype, apterous ♂, and allotype, apterous ♀, Michoacan, Jacona, CL 743, VI-12-1975, J. T. Polhemus. Paratypes as follows: Michoacan: 26♂♂, 54♀♀ apterous, 8♂♂, 24♀♀ alate, same data as holotype (JTP); 23♂♂, 17♀♀ apterous, 17♂♂, 5♀♀ alate, Jacona, CL 1032, 23 April 1964, J. T. & M. S. Polhemus (CU, JTP); 18♂♂, 8♀♀ apterous, 8♂♂, 3♀♀ alate, 22 mi W of Patzcuaro, CL 1033, 23 April 1964, J. T. & M. S. Polhemus (CU, JTP); 1♂, 2♀♀ apterous, 5♂♂, 10♀♀ alate, nr. Tacambaro, CL 746, VI-14-1975, J. T. Polhemus (JTP). Sinaloa: 1♂ apterous, 2♂♂, 4♀♀ alate, Santa Lucia, CL 1019, 20 April 1964, J. T. & M. S. Polhemus (CU, JTP).

Discussion.—This species is closest to *Rhagovelia distincta* Champion, which has a very wide geographic range, from Guatemala and Honduras to Wyoming and Utah in the United States. Gould (1931) proposed six varieties for various forms of *distincta* from the western U.S. and Mexico, but these were suppressed by Bacon (1956). *Rhagovelia atrispina* is darker than any of the *distincta* varieties proposed by Gould and is easily distinguished by the black spine on the fore trochanter, by the more distal placement of the large tooth and by the larger number of small basal teeth on the posterior femur.

So far, *atrispina* and *distincta* have not been found sympatrically, but they occur within a short distance of each other in the Sierra Madre Occidental. As no intergrades have been seen, I prefer to treat *atrispina* as a new species rather than subspecies.

Xiphovelia lacunana (Drake and Plaumann), new combination
Microvelia lacunana Drake and Plaumann, 1953. Dusenia. 4:415.

To date no true members of the genus *Xiphovelia* Lundblad have been recorded from the New World. Drake and Harris (1936) transferred their *Microvelia diffidens* and *M. turmalis* to *Xiphovelia*, but in 1955 Herring erected the genus *Husseyella* to hold them. I find, however, that *M. lacunana* is a true *Xiphovelia*.

I have studied the types of *Xiphovelia eunis* Lundblad, and three species of Asian *Xiphovelia* for comparison; and except for the saber-like paramere and the lack of apterous specimens, *lacunana* is a typical *Xiphovelia*, with the body dorsoventrally compressed and the head and eyes closely appressed to the pronotum.

Material examined.—BRASIL: 1♀, Matto Grosso, 1953 (paratype) (JTP); 1♂, Linha Façao, St. Catarina, V-1957 (JTP); 1♂, Nova Teutonia, III-1962; 101 specimens, Nova Teutonia, XI-1961, F. Plaumann (JTP). (All specimens are macropterous.)

An Emendation of Names in the *Microvelia austrina* Group

I recently published new taxa (Polhemus, 1974) in the *M. austrina* Group which, through various errors, are either misspelled or incorrectly formed. They are emended as follows:

Originally published name (all in <i>Microvelia</i>)	Emendation or correction
<i>leavipleura</i>	<i>laevipleura</i>
<i>laevepleura</i>	
<i>glabrosulcata</i>	<i>glabrosulcata</i>
<i>glabrosulcuta</i>	
<i>depressus</i>	<i>depressa</i>
<i>reflexus</i>	<i>reflexa</i>

I am indebted to G. C. D. Griffiths for calling my attention to the errors, and to J. L. Herring, A. L. Menke and G. C. Steyskal for helpful comments.

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Footnote

¹ Contribution from the University of Colorado Museum and Department of Environmental Population and Organismic Biology, University of Colorado, Boulder, 80302.

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NOTE

RICHARDIA EBURNEOSIGNATA HENNIG (DIPTERA: RICHARDIIDAE), A NEW RECORD FOR THE GENUS NORTH OF MEXICO

A fine male specimen of *Richardia eburneosignata* Hennig was determined recently out of a lot submitted my Howard V. Weems, Jr., of the Florida State Collection of Arthropods, Gainesville. The specimen was taken by Fred C. Harmston at Rio Grande City, Starr County, Texas, in October 1967. Permission to deposit this specimen in the U.S. National Museum Collections is much appreciated.

This species is the northernmost known of its genus; the previous northernmost record of which I am aware is Xilitla, San Luis Potosí, Mexico, about 500 km south of Rio Grande City.

The genus *Richardia* is easily recognized by hindfemora considerably more swollen than the others. The species is recognized by a single brown transverse band through both crossveins and a brown spot on the tip of the wing; the dorsum of the thorax is mostly black and bears longitudinal whitish and brown stripes of tomentum; the posterior margin of the mesopleuron has a creamy white wedge of ground color; and the abdomen is largely metallic blue. Nothing is known of the habits of the species, or indeed of the genus.

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